

## CLAIMS

What is claimed is:

- 5 1.A miniature motor structure, comprising :  
a stator, further comprising :  
a first coil seat, including a first bottom plate, a  
plurality of first outer teeth, a plurality of first inner  
teeth ;  
10 a coil, formed in the first coil seat ;  
a second coil seat, including a second bottom plate, a  
plurality of second outer teeth, a plurality of second  
inner teeth, said second coil seat formed on the first coil  
seat, each of said second outer teeth interposed between  
15 said adjacent first outer teeth, each of said second inner  
teeth interposed between said adjacent first inner teeth ;  
a circular magnet, surrounding said stator ; and  
a shift, coupled to said stator.
- 20 2.The miniature motor structure according to claim 1,  
wherein said first bottom plate further includes a first  
central opening, said first outer teeth protruding from said  
first bottom plate and surrounding an outer periphery of  
said first bottom plate, said first inner teeth protruding  
25 from said first bottom plate and surrounding said first  
central opening.
- 30 3.The miniature motor structure according to claim 1,  
wherein said second bottom plate further includes a second  
central opening, said second outer teeth protruding from

said second bottom plate and surrounding an outer periphery of said second bottom plate, said second inner teeth protruding from said second bottom plate and surrounding said second central opening.

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4.The miniature motor structure according to claim 1, further comprises a metal housing surrounding said circular magnet and used to avoid magnetic leakage.

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5.The miniature motor structure according to claim 1, wherein said first coil seat and said second coil seat are made of silicon steel.

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6.The miniature motor structure according to claim 1, wherein said coil is positioned in a space defined by said first coil seat and said second coil seat.

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7.The miniature motor structure according to claim 1, wherein said coil is preformed.

8.The miniature motor structure according to claim 1, wherein said coil is wound around a post consisting of said first coil seat and said second coil seat.

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9.The miniature motor structure according to claim 1, wherein said first inner teeth and said second inner teeth further comprise a cut corner.

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10.The miniature motor structure according to claim 1, wherein said first inner teeth and said second inner teeth

further comprise an arc.

11. The miniature motor structure according to claim 1,  
wherein said first inner teeth and said second inner teeth  
further comprise a gap.

12. A miniature motor structure, comprising :

a stator, further comprising :

a first coil seat, including a first bottom plate, a  
plurality of first outer teeth, a plurality of first inner  
teeth, said first bottom plate further including a first  
central opening, said first outer teeth protruding from  
said first bottom plate and surrounding an outer  
periphery of said first bottom plate, said first inner teeth  
protruding from said first bottom plate and surrounding  
said first central opening ;

a coil, formed in the first coil seat ;

a second coil seat, including a second bottom plate, a  
plurality of second outer teeth, a plurality of second  
inner teeth, said second coil seat formed on the first coil  
seat, said second bottom plate further including a  
second central opening, said second outer teeth  
protruding from said second bottom plate and  
surrounding an outer periphery of said second bottom  
plate, said second inner teeth protruding from said  
second bottom plate and surrounding said second  
central opening, each of said second outer teeth  
interposed between said adjacent first outer teeth, each  
of said second inner teeth interposed between said  
adjacent first inner teeth ;

a circular magnet, surrounding said stator ;  
a metal housing, surrounding said circular magnet ; and  
a shift, coupled to said stator.

5 13.The miniature motor structure according to claim 12,  
wherein said first coil seat is identical to said second coil  
seat.

10 14.The miniature motor structure according to claim 12,  
wherein said first coil seat and said second coil seat are  
made of silicon steel.

15 15.The miniature motor structure according to claim 12,  
wherein said coil is positioned in a space defined by said  
first coil seat and said second coil seat.

16.The miniature motor structure according to claim 12,  
wherein said coil is preformed.

20 17.The miniature motor structure according to claim 12,  
wherein said coil is wound around a post consisting of  
said first coil seat and said second coil seat.

25 18.The miniature motor structure according to claim 12,  
wherein said first inner teeth and said second inner teeth  
further comprise a cut corner.

30 19.The miniature motor structure according to claim 1,  
wherein said first inner teeth and said second inner teeth  
further comprise an arc.

20. The miniature motor structure according to claim 1,  
wherein said first inner teeth and said second inner teeth  
further comprise a gap.

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